

CLAIMS

What is claimed is:

1. A workpiece seat for the machining of bar-shaped workpieces by milling and
2 turning operations, said workpiece seat comprising:
an elongated housing;
4 a spindle rotatably supported in the housing, said spindle having a working end;
an electric direct drive for the spindle, said drive comprising a rotor fixed on the spindle
6 and a stator fixed in the housing;
a clamping means provided at the working end of the spindle, said clamping means being
8 shaped and configured for fixing a bar-shaped workpiece in the spindle;
a connection unit provided at a rear part of the housing for energy supply; and
10 a fixing means for fixing the spindle in the housing, said fixing means being formed as a
compact part and arranged at the working end of the spindle.

2. The workpiece seat according to claim 1, further comprising a front-side spindle
2 bearing arrangement.

3. The workpiece seat according to claim 1, wherein a fixing means is arranged on
2 the working end of the spindle before the front-side spindle bearing arrangement.

4. The workpiece seat according to claim 3, wherein the fixing means comprises at least one fixing element at least partially surrounding the spindle, which directly acts on the peripheral surface of the spindle.

5. The workpiece seat according to claim 4, wherein the fixing element is arranged in a housing part such that it can be moved or deformed by a driving force.

6. The workpiece seat according to claim 3, wherein the fixing means further comprises an annular elongated pressure chamber formed in the housing part, into which at least one pressure-oil channel terminates and which is limited in a radial inward direction by a deformable radial inner wall.

7. The workpiece seat according to claim 4, wherein the fixing means further comprises an annular elongated pressure chamber formed in the housing part, into which at least one pressure-oil channel terminates and which is limited in a radial inward direction by a deformable radial inner wall.

8. The workpiece seat according to claim 5, wherein the fixing means further comprises an annular elongated pressure chamber formed in the housing part, into which at least one pressure-oil channel terminates and which is limited in a radial inward direction by a deformable radial inner wall.

9. The workpiece seat according to claim 6, wherein the radial inner wall of the
2 pressure chamber is a constituent of the housing part.

10. The workpiece seat according to claim 6, wherein the radial inner wall of the
2 pressure chamber is a resilient sleeve.